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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,743	01/30/2004	Christian Bauer	713-1009	5720
33712	7590	11/01/2005		
LOWE, HAUPTMAN, GILMAN & BERNER, LLP (ITW) 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314			EXAMINER REESE, DAVID C	
			ART UNIT 3677	PAPER NUMBER

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/767,743

Applicant(s)

BAUER, CHRISTIAN

Examiner

David C. Reese

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-17, 19-22 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-17, 19-22 and 24-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to Applicant's RCE filed 8/15/2005.

Status of Claims

- [1] Claims 6-17, 19-22, 24-27 are pending.

Drawings

- [2] The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first and second boundary lines from claims 6, 13, 17, and 27 must be shown, or a more detailed description of said boundary lines in the disclosure regarding its features in Figure 4 must be discussed or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

[3] The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: In Claims 6, 13, 17, and 27, amended subject matter, mainly including the first and second boundary lines, have not been discussed to any extent in the specification.

Claim Rejections - 35 USC § 112

[4] The newly amended subject matter from Claims 6, 13, 17, and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Though the examiner is aware of the particular aspect of the grommet the applicant is attempting to claim in the instant claim, the amended subject matter, as written, remains vague and indefinite when referring to the first and second boundary lines, as well as the relationship of said boundary lines with the points as described in the above claims. To help clear the issue, further labels on the diagrams may be necessary (see above); a more descriptive specification (with regard to the diagrams) regarding such subject matter; or lastly, an alteration of the terminology of the instant claim.

Claim Rejections - 35 USC § 102

[5] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[6] Claims 6-25 are rejected under 35 U.S.C. 102(b) as clearly anticipated by Sato, US-4,927,306, because the invention was patented or described in a printed publication in this or a foreign country, or in public use or on sale in this country more than one (1) year prior to the application for patent in the United States.

The shape and appearance of Sato is identical in all material respects to that of the claimed design, *Hupp v. Siroflex of America Inc.*, 122 F.3d 1456, 43 USPQ2d 1887 (Fed. Cir. 1997).

As for Claim 6, Sato teaches of a fastener (1) adapted to be inserted into an opening of a sheet member (11) having opposite upper (2) and lower surfaces (3), said fastener (1) comprising:

a shank (3) extending in an axial direction of said grommet and having opposite upper (2) and lower ends (1);

at least a locking tab (6a) coupled to said shank (3) between the upper (2) and lower ends (3) of said shank (3) and radially flexible relative to said shank (3); and

a head (2) connected to the upper end of said shank (3) and comprising a flange (2) adapted to engage the upper surface of the sheet member (11) when said shank (3) and said locking tab (6a) are snapped into the opening (12);

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wherein said shank (3) comprises

a shoulder (5) in a region adjacent the head (2), said shoulder (5) being adapted to be placed below an edge of the opening (12) when said shank (3) is moved transversely to said axial direction after being snapped into the opening, thereby preventing withdrawal of said shank (3) from said opening (12); and

an outer surface section (vertical aspect connecting 5 to 2) inclined relative to the axial direction and connecting said shoulder (5) and the lower surface of said head (2), for engaging the edge of the opening (12) and drawing said shank (3) into the opening (12) when said shank (3) is moved transversely to said axial direction; and

wherein, when said shank (3) is seen along said axial direction, said shoulder (5) is confined between an outer edge of said shank (3) and a first boundary line intersecting said outer edge at two points, and said outer surface section (vertical aspect connecting 5 to 2) is confined between said first boundary line and a second boundary line converging toward one of said points.

Re: Claim 7, wherein the outer surface section (vertical aspect connecting 5 to 2) is planar, and the shoulder (5) is planar and perpendicular to the axial direction.

Re: Claim 8, wherein said locking tab (6a) has a lower end (6) directly connected to said shank (3) and an upper end which is free of any direct attachment with said shank (3) and is connected to said shank (3) exclusively via the lower end (6) of said locking tab.

Re: Claim 9, wherein said shank (3), as seen along said axial direction, has a rectangular cross section (Fig. 5), and the shoulder (5) is located in a corner portion of said rectangular cross

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section, longitudinally extends toward an adjacent corner portion of said rectangular cross section, and has a width that decreases along said longitudinal extent.

Re: Claim 10, wherein the region of said shank with said shoulder (5) is less radially flexible than said locking tab (6a).

Re: Claim 12, wherein said outer surface section (vertical aspect connecting 5 to 2) is closer to said head (2) than an uppermost surface of said flexible locking tab (6a).

Re: Claim 14, wherein said shank (3) has an approximately rectangular cross section (Fig. 5), taken perpendicular to said axial direction in the region adjacent to said head (2), and said shoulder (5) and said outer surface (vertical aspect connecting 5 to 2) are located within and in a corner portion of the approximately rectangular cross section (Fig. 5).

Re: Claim 15, wherein said locking tab (6a) projects radially outwardly from a middle of a side of the approximately rectangular cross section (Fig. 5).

Re: Claim 16, wherein said shank (3) comprises at least two said shoulders (5) and two said outer surface sections (vertical aspect connecting 5 to 2) being located in two diagonally opposite corner portions of said shank (3), thereby allowing said shank to be rotatable within the opening about an axis of said grommet.

Re: Claim 19, wherein said shank (3) and said head (2) together define an axial bore (4) adapted to receive and retain therein an elongated fastening element.

Re: Claim 20, comprising a plurality of said flexible locking tabs (6a), wherein said shoulder (5) is not part of any of said locking tabs (6a).

Claim Rejections - 35 USC § 103

[7] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[8] Claims 11, 21, 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato, US- 4,927,306, in view of Mizuno, US-6,560,819.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claim 11, Sato teaches that of the above claims.

The difference between the claim and Sato is the claim recites that the outer surface section extends radially inwardly. Mizuno discloses a grommet similar to that of Sato. In addition, Mizuno further teaches of a variety of inclined surfaces for an outer surface (Figs. 7A-7D). It would have been obvious to one of ordinary skill in the art, as well as art recognized equivalence, having the disclosures of Sato and Mizuno before him at the time the invention was made, to modify the shoulder of Sato (5) to include the structure of that as provided by Mizuno in his Fig. 7C. One would have been motivated to make such a combination because such a configuration of utilizing an inclined surface as proposed by one of embodiments by Mizuno,

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specifically of that shown in Fig. 7C would, as stated in col. 2, beginning with line 4, “that regardless of the thickness of the member being mounted, there is no possibility that the entire grommet can move axially.” Also, as stated by Mizuno in col. 1, line 65, “The inclined surfaces push a member being mounted in a upward direction and an upper surface of the member being mounted is brought into close contact with a flat back surface of the head”. This disclosed by Mizuno is in turn comparable to the purpose of said inclined surface in the applicant’s invention, the disclosure of which states “ensuring that the head gets into engagement with the support member side and produces a sufficient sealing action, as well as ensuring that the grommet, when under a tensile load, does not come loose from sheets of lesser thicknesses.”

It is further stated by the applicant that a specific problem with fasteners of the like is that “the distance between the shoulder and the underside of the head cannot be prevented from being larger than the thickness of the support member. This can cause the grommet, when under a load, to come loose from the support member”. The inclination provided by the shoulder, stated by the applicant, helps solve this problem. Mizuno, in the same light, provides a similar disclosure indicating, as stated in the above paragraph, an emulative purpose of such an inclined surface, and since the reference addresses this narrow problem, a person seeking to solve that exact same problem would consult the references and apply their teachings together.

As for Claim 21, Sato teaches of a fastener (1) adapted to be inserted into an opening of a sheet member (12) having opposite upper (2) and lower surfaces (3), said fastener comprising:

a shank (3) extending in an axial direction of said grommet (1) and having opposite upper (2) and lower ends (1);

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a head (2) connected to the upper end of said shank (2) and comprising a flange (2) adapted to engage the upper surface of the sheet member (11) when said shank (3) is inserted into the opening (12);

wherein said shank (3) comprises

a shoulder (5) in a region adjacent the head (2), said shoulder (5) being adapted to be placed below an edge of the opening (12) when said shank (3) is moved transversely to said axial direction after being snapped into the opening (12), thereby preventing withdrawal of said shank (3) from said opening (12); and

an inclined outer surface section (Sato in view of Fig. 7C of Mizuno) connecting said shoulder (5) and the lower surface of said head (2), for engaging the edge of the opening (12) and drawing said shank (3) into the opening (12) when said shank (3) is moved transversely to said axial direction, wherein said included outer surface section extends continuously, radially inwardly and upwardly from said shoulder (Sato in view of Fig. 7C of Mizuno) to the lower surface of said head (2).

Re: Claim 22, further comprising a plurality of flexible locking tabs (6a) coupled to said shank (3) between the upper (2) and lower ends (3) of said shank (3) for preventing withdrawal of said grommet (1) from the opening after said shank (3) and said locking tabs (6a) are snapped into the opening (12), wherein said outer surface (Sato in view of Fig. 7C of Mizuno) is closer to said head (2) than an uppermost part of said flexible locking tabs (6a).

Re: Claim 24, said grommet (1) further comprising at least a locking tab (6a) coupled to said shank (3) between the upper (2) and lower ends (3) of said shank (3) and radially flexible relative to said, said locking tab (6a) being located below the lower surface of said sheet member

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(11) without engaging the lower surface (6a does not have to be engaging the lower surface, do to their flexibility).

As for Claim 25, Inoue teaches of a
a sheet member (11) having opposite upper (top of 11) and lower (bottom of 11) surfaces
and an opening (12) connecting the upper and lower surface; and
a grommet (1) plugged in said opening (12), said grommet (1) comprising:
a shank (3) extending in an axial direction of said grommet (1) and having opposite upper
(2) and lower ends (3);
a head (2) connected to the upper end of said shank (3) and comprising a flange (2)
adapted to engaging the upper surface of the sheet member (11)
wherein said shank (3) comprises
a shoulder (5) in a region adjacent the head (2), said shoulder (6a) being adapted to be
placed below an edge of the opening (12) when said shank (3) is moved transversely to said axial
direction after being snapped into the opening (12), thereby preventing withdrawal of said shank
(3) from said opening (12); and
an inclined outer surface section (Sato in view of Fig. 7C of Mizuno) connecting said
shoulder (5) and the lower surface of said head (2), for engaging the edge of the opening (12)
and drawing said shank (3) into the opening (12) when said shank (3) is moved transversely to
said axial direction, wherein said included outer surface section extends continuously, radially
inwardly and upwardly from said shoulder (Sato in view of Fig. 7C of Mizuno) to the lower
surface of said head (2); and

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wherein the region of said shank (3) with said shoulder (5) has a cross section allowing said region to pass through said opening without being deformed (depending on the size of the opening).

Re: Claim 26, wherein said outer surface section extends continuously, exclusively radially inwardly and upwardly from said shoulder all the way to the slower surface of said head (Sato in view of Fig. 7C of Mizuno).

In conclusion, the examiner would also like to inform the applicant that an additional notice of reference cited has been submitted with this office action further showing the prevalence of such an inclination as discussed above and its saturation within the art.

Conclusion

[9] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited further to show the state of the art with respect to this particular type of fastener; as well as their extreme relevance to the current application as many read extensively onto the claimed invention: please see submitted notice of reference cited.

[10] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272-7082. The examiner can normally be reached on 7:30 am-6:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached at (571) 272-7075. **Please also note the change in the fax phone number to (571) 273-8300 for the organization where this application or proceeding is assigned.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DCR

Sincerely,
David Reese
Assistant Examiner
Art Unit 3677


ROBERT J. SANDY
PRIMARY EXAMINER